

DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE

**VELOCITY SURVEY
REPORTER'S HANDBOOK**

For Use in Reporting Velocity Surveys for Outer Continental Shelf Wells

Revision 1 (March 5, 2003)

Foreword

This Velocity Survey Reporter's Handbook is designed to aid the person submitting these reports addressed in the operating regulations 30 CFR Part 250. Requirements for submitting a copy of the velocity survey report and digital survey data are detailed on the following pages.

This revision corrects language for depth references. The reported depth for each travel time should not be measured depth but rather "The vertical distance, in feet, from sea level to the measurement point."

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Code of Federal Regulations (CFR) and Notice to Lessees (NTL)

Title 30 – Mineral Resources – Chapter II – Minerals Management Service (MMS), Department of the Interior, Part 250 – Oil and Gas and Sulphur Operations in the Outer Continental Shelf (OCS) contains regulations for OCS mineral activities. These regulations can be found online at:

<http://www.access.gpo.gov/nara/cfr/index.html>

30 CFR 250.416 requires lessees/operators (you) to submit complete drilling well records for each well and all well operations. This includes velocity surveys. Notice to Lessees and Operators (NTL) 97-06 and NTL 98-18 provide guidance on submitting velocity surveys for Gulf of Mexico Region (GOMR) OCS boreholes. NTL 2002-G12 describes requirements for datums and datum transformations for the GOMR.

Who must file?

Any operator of a lease or unit on the Federal OCS who has drilled a well for the purposes of exploration for, or development of, oil or gas resources. This includes wells currently drilling, previously drilled and temporarily abandoned, or previously drilled and completed.

What information must be filed?

One digital copy and one paper copy of the velocity survey to the respective OCS Region indicated below. Legible, exact copies of service company report or log should be submitted. The report should include or be annotated with the API number, well name and number, well name suffix, contractor or service provider, and contact name (phone number or e-mail address). The digital copy should be comparable to the paper copy. Submit these survey results on IBM PC compatible 3.5" or 5.25" diskettes. Use the specific formatting for velocity data described in the **NTL 97-06 Attachment No. 1**, "Exchange Format for Velocity Surveys." A reference appendix is also attached to this handbook.

When must the Survey be submitted?

Velocity surveys shall be submitted as soon as available, but not later than 30 days after the completion of operations, temporary or permanent abandonment takes place or suspension of operations of a specific well. NTL's 97-06, 97-06 Attachment No. 1, and 98-18 provide further guidance on reporting formats and timely submittal, respectively.

Where reports and related correspondence must be sent.

Related correspondence, inquiries, and data should be submitted to the appropriate OCS Region at the address below. In lieu of mailing, these files may be sent via email at the discretion of the operator.

Note: The MMS gateway is not encryption-protected at this time. When digital data submission is sent by E-mail include the name, address, and telephone number of the person to contact to provide additional information.

GULF OF MEXICO OCS REGION

Technical Data Management Section (MS 5020)
Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394
Phone: (504) 736-2911 or 736-2566
Fax: (504) 736-2857
Internet email: tdms@mms.gov

PACIFIC OCS REGION

Minerals Management Service (MS 7100)
Office of Production, Development, and Resource
Evaluation
770 Paseo Camarillo
Camarillo, CA 93010-6064
Phone: (805) 389-7737 or 389-7700
Fax: (805) 389-7737
Internet email: pdra@mms.gov

ALASKA OCS REGION

Minerals Management Service (MS 8200)
Office of Field Operations, Alaska OCS Region
949 East 36th Avenue, Room 308
Anchorage, AK 99508-4363
Phone: (907) 271-6065

Amended Reporting and Situations requiring correction.

In the event of an incorrectly identified survey or misidentified survey information, please submit corrected information to the appropriate address cited above with a notation to indicate that information is a corrected copy.

Examples of misidentified information may include wrong API number, wrong well bore name, or invalid survey data points, etc.

Related Links

Regulations can be found online at:

<http://www.access.gpo.gov/nara/cfr/index.html>

<http://www.gomr.mms.gov/homepg/regulate/regs/ntlntl.html> (main link)

NTLs for the Gulf of Mexico OCS Region:

[NTL No. 97-06 Timely Submittal of Drilling Well Records in Accordance with 30 CFR 250.66](#)

Effective Date: March 1, 1997

[NTL No. 97-06, Attachment No. 1 Exchange Format for Velocity Surveys](#)

Effective Date: March 1, 1997

[NTL No. 98-18 Change of Address for the Submittal of Certain Drilling Well Records in Accordance with 30 CFR 250.416](#)

Effective Date: September 1, 1998

[NTL No. 2000-G03 Functional Responsibility of MMS Regulations](#)

Effective Date: January 28, 2000

[NTL No. 2000-N07 Well Naming and Numbering Standards](#)

Effective Date: May 1, 2001

[NTL No. 2002-G05 Open Hole Log and Survey Information for the Weekly Activity Report](#)

Effective Date: June 11, 2002

[NTL No. 2002-G12 Revised North American Datum 83 Implementation Plan for the Gulf of Mexico](#)

Effective Date: November 4, 2002

NTLs for the Alaska OCS Region:

<http://www.mms.gov/alaska/regs/NTLS.HTM>

NTLs for the Pacific OCS Region:

<http://www.mms.gov/omm/pacific/offshore/ntls/ntllist.htm>

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Appendix

Digital Exchange Format for Velocity Surveys

1. Definition of terms.

- (1) A record consists of 80 data bytes, including the carriage-return in the 81st column and line-feed in the 82nd column (HEX 'ODOA').
- (2) A file is a group of header records and data records physically separated by an inter-record gap (a blank record) and terminating with a control Z (HEX '1A').

2. Specifications for digital reporting of data

- (1) Data format suitable for any IBM PC computer or compatible.
- (2) 3.5" or 5.25" diameter diskette standard.
- (3) Coded ASCII mode standard.
- (4) A file cannot span multiple diskettes.
- (5) A diskette may contain numerous surveys.

The label should identify the name, address, and telephone number of the person to contact should problems occur when loading the data. The contents of the diskette should also be identified. The diskette(s) should be packaged in containers specifically designed for floppy diskettes.

3. The subdivision of contents.

- (1) A velocity survey will contain header record(s), data record(s), and terminate with an end-of-file marker.
- (2) As many header and data records as necessary may be used within a file. Header records must precede the first data record in the file.
- (3) The diskette may contain numerous surveys. The last record of the diskette must be the end-of-file marker.

4. Form of header.

A header record will be identified by an H as the first character of the record. The first header record is a mandatory, formatted record that consists of:

- a. Header Record ID - The letter H to identify the record as a header record in column 1 followed by a space in column 2.
- b. API Number (12 numeric characters available beginning in column 3) - The 12-digit unique identifier to a wellbore assigned by the MMS District office. The full 12 digit identifier that

identifies the well and the wellbore, as prescribed by the American Petroleum Institute D-9 Committee, appearing in Bulletin D-12 published April 1966. This data element occupies columns 3 through 14 followed by a space in column 15.

- c. Date Survey Conducted (6 numeric characters available beginning in column 16) - The year, month, and day (in format YYMMDD) the final survey was conducted. This data element occupies columns 16 through 21. End with a <carriage return>.

For example: H 608123456701 980113<carriage return>

In addition to the mandatory, formatted first header record, it is recommended that other relevant information pertaining to the conditions under which the survey was conducted be included in the header. Other data contained in the header must begin with the H in column 1, but their arrangement is flexible in free format for columns 2-80. Examples of other header records are:

- a. Type of Instruments Used to Take the Measurements – For example, e.g., magnetic single shot, magnetic multi-shot, gyroscopic, etc.
- b. Contractor - The name of the company that conducted the survey.
- c. Survey Interval - The depths, in feet, of the beginning and ending measurement points.

5. Form of data.

Each data record is to contain information recorded at a given measurement point. A data record for each measurement point must be provided. Data survey records must be ordered beginning from surface to the bottom of the well bore.

The content of the data record block is as follows:

<u>Item</u>	<u>Description</u>	<u>Format Columns Comments</u>
1.	Depth	I5 1-5 The vertical distance, in feet, from sea level to the measurement point. Use a zero in column 1 when the depth is less than 10000 feet. Spaces or commas should not be used.
2.	Travel Time	I5 6-10 The one-way vertical travel time in milliseconds, corrected to sea level.
3.	Unused Space	11-80 Unused space for future use.